AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 1, lines 3-6 with the following paragraph:

The present application is related to the concurrently filed applications: Serial No. 10/674,173, "Magnetic Storage Media Having Tilted Magnetic Anisotropy;" and Serial No.10/673,746, "System, Method and Collimator for Oblique Deposition.

Please replace the paragraph at page 9, lines 2-9 with the following paragraph:

Figure 3 shows an embodiment of shadow mask 46 with aperture 48 relative to substrate 44. The width of [[the]] aperture 48, as shown, varies as a function of distance from [[the]] center 54. As the width of [[the]] aperture 48 narrows, the allowed angular deviation in the directionality of the angle of incidence of the vaporized species also decreases. By varying the shape of [[the]] aperture 48 one can control the angular distribution of alignment in the thin film as a function of distance from [[the]] center 54 of [[the]] shadow mask 46, if desired. Alternatively, aperture 48 may have a constant width.

Please replace the paragraph at page 9, lines 19-25 with the following paragraph:

As shown in FIG. 3, [[the]] shadow mask 46 generally extends beyond the area of substrate 44. The aperture may extend to [[the]] edge 53 of shadow mask 46 as shown in FIG. 3 or alternatively may be closed forming a defined opening in shadow mask 46 as ~~sown~~ shown in FIG. 4. In general, the length of aperture 48 is related to the radius of substrate 44. ~~The aperture~~ Aperture 48 may alternatively be defined so as to direct deposition to less than the entire surface of substrate 44.

Please replace the paragraph at pages 9 and 10; page 9: lines 26-29; page 10: lines 1-6 with the following paragraph:

Figures 4 and 5 provide alternative perspective views of deposition system 40. In FIGS. 4 and 5, an oblique deposition mean of vaporized species 52 strikes substrate 44 through shadow mask

46. ~~The shadow~~ Shadow mask 46 of deposition system 40 has [[a]] at least one long narrow aperture 48 that is oriented either perpendicular as seen in FIG. 4 or parallel as seen in FIG. 5 to [[an]] a deposition beam of vaporized species 52 from a source 42 (not shown). Oblique deposition occurring through [[the]] shadow mask 46 results in only a radial segment of [[the]] substrate 44 being deposited at any given instant, allowing the segment to have a well-defined pattern either parallel or perpendicular to [[the]] deposition beam 52.

Please replace the paragraph at page 10, lines 7-21 with the following paragraph:

Additional embodiments of deposition system 40 are shown in FIGS. 6 and 7. Shadow mask 46 may include a plurality of apertures 48 in order to improve throughput of [[the]] deposition system 40. Examples of shadow masks with multiple apertures and suitable wall construction are shown in FIGS. 6 and 7. In FIG. 6, each aperture 48 has its own source 42, (not shown) represented by deposition beam 60, and separated by a sectioning wall 56 attached perpendicular to the shadow mask 46. Sectioning wall 56 has a thickness such that each deposition beam 60 provides vaporized species for only one aperture 48. The thickness of sectioning wall 56 may extend from the shadow mask to the height of the deposition chamber enclosing [[the]] deposition system 40. However, any thickness of sectioning wall 56 which sufficiently prevents leakage of vaporized species from one zone 57 to another is sufficient. FIG. 6 shows an example with four zones, but the number of zones is essentially only limited by deposition system size limitations. FIG. 6 is suitable for the deposition of tilted thin films with a radial pattern and azimuthal symmetry.

Please replace the paragraph at page 11, lines 7-13 with the following paragraph:

A unidirectional pattern is defined as when all the grains (or other feature of interest) are oriented generally parallel throughout the substrate, for example, as shown in FIG. 8. A unidirectional pattern is unsuitable for applications, such as hard discs, that are circular for purposes of rotation during

use and consequently perform optimally where the pattern is of a circular nature. The deposition system [[40]] of the present invention overcomes previous problems limiting the oblique deposition of tilted thin films suited for circular substrates.

Please replace the paragraph at page 11, lines 14-24 with the following paragraph:

The inventive deposition system is preferably utilized to deposit thin films with either circumferential or radial patterns on rotating circular substrates. A circumferential pattern is defined as the organization of the grain orientations, or other feature of interest including, but not limited to: C-axis, crystallographic axis, easy axis, and magnetocrystalline anisotropy[[;]] around a central point or axis. A circumferential pattern on a circular substrate is represented in FIG. 9. A radial pattern is defined ~~is defined~~ as the organization of orientations of the grains, or other feature of interest including, but not limited to: C-axis, crystallographic axis, easy axis, and magnetocrystalline anisotropy[[;]] along radial axes from a central point. A radial pattern on a circular substrate is represented in FIG. 10.

Please replace the paragraph at page 12, lines 7-15 with the following paragraph:

The phrase "tilted thin film" of the present invention refers to thin films produced by oblique deposition. The "tilt" produced by oblique deposition refers generally to the readily observable (by electron microscopy) tilt in the grains or other crystal related structures within a cross-section of an oblique deposited material. Use of the inventive deposition system [[20]] is not limited to deposition of particular types of thin films, other [[that]] than the desire for the particular thin film to be oblique deposited. For example, the inventive deposition system may be used to deposit seedlayer structures and magnetic material layers.

Please replace the paragraph at page 12, lines 16-26 with the following paragraph:

The thin films produced with the inventive deposition system [[40]]; depending on the material and specifics of the physical vapor deposition process used; result in tilted grain growth, tilted crystallographic texture, anisotropic stress, correlated surface roughness, or any combination thereof. For example, in magnetic materials, the symmetry, pattern, of orientation of the deposited layer may be focused on the magnetic anisotropy, especially the magnetocrystalline anisotropy, of the tilted thin film. The magnetic anisotropy, which generally ~~related~~ relate to the crystallographic characteristics of the material, may be separately analyzed. The magnetic anisotropy is of special interest in hard drive technologies where there is much interest in creating thin films with tilted magnetic anisotropy, also referred to as tilted media.

Please replace the paragraph at pages 12 and 13; page 12: lines 27-29; page 13: lines 1-7 with the following paragraph:

It is advantageous to combine the teachings of the present invention with the teachings of U.S. Patent Application Serial No. 10/674,173 titled "Magnetic Storage Media Having Tilted Magnetic Anisotropy," filed concurrently with the present application and incorporated herein by reference, hereinafter referred to as the "Tilted Media Application". The combination of the Tilted Media Application with the teachings of the present invention is useful to produce magnetic media with tilted C-axis and tilted magnetic anisotropy, wherein the tilted C-axis and tilted magnetic anisotropy are arranged in a circumferential or a radial pattern and additionally possess azimuthal symmetry.

Please replace the paragraph at page 13, lines 8-15 with the following paragraph:

The shadow mask [[46]] of the present invention may alternatively be combined with a separate collimator, for example a honeycomb style grid or the subject of the related application, Serial No. 10/673,746, "System, Method and Collimator for Oblique Deposition," filed concurrently with the present application and incorporated herein by reference. The combination of the inventive shadow mask [[46]]

with either a built-in or separate collimator can be used to further enhance the collimation of the deposition beam at the surface of the substrate in one of a plurality of directions or all directions concurrently.